Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Changes in Enzyme Function Worksheet**

Ms. Ottolini, Pre-AP Biology

***Directions:*** *Predict how changes in the following independent variables (shown on the x-axis of each graph) will affect the rate (speed) of reaction for a reaction catalyzed by an enzyme. Draw a curve that shows the predicted changes in the rate of reaction for each change in the independent variable.*

1. Substrate Concentration (# of substrate molecules)

**Explanation for Predictions:**



**Substrate Concentration**

1. Enzyme Concentration (# of enzyme molecules)

**Explanation for Predictions:**



**Enzyme Concentration**

1. pH

**Explanation for Predictions:**



**pH**

1. Temperature (in degrees Celsius)



**Temperature**

**Explanation for Predictions:**